

IN THE CLAIMS:

1. (Previously presented) A method comprising:
 - delivering a pacing pulse to a heart;
 - sensing a ventricular signal resulting from the delivered pacing pulse;
 - detecting intrinsic ventricular activity within the sensed ventricular signal within the heart after delivering the pacing pulse; and
 - extending a pacing interval between the delivered pacing pulse and a subsequently delivered pacing pulse based on the detection of intrinsic ventricular activity.
2. (Original) The method of claim 1, further comprising modifying the pacing interval to aid in detecting intrinsic ventricular activity within the heart.
3. (Original) The method of claim 2, wherein modifying the pacing interval includes modulating an atrial to ventricular pacing delay.
4. (Original) The method of claim 1, wherein the pacing pulse delivered to the heart comprises a pacing pulse delivered to a ventricle of the heart.
5. (Original) The method of claim 1, wherein the subsequently delivered pacing pulse comprises a pacing pulse delivered to a ventricle of the heart after the delivered pacing pulse.
6. (Previously presented) The method of claim 1, wherein detecting intrinsic ventricular activity within the heart comprises comparing a past ventricular signal resulting from a past pacing pulse with the ventricular signal resulting from the delivered pacing pulse.

7. (Original) The method of claim 6, wherein a past ventricular signal comprises a past ventricular signal that is representative of a ventricular signal where the heart is fully captured by the past pacing pulse.

8. (Original) The method of claim 6, wherein a past ventricular signal further comprises a most recent ventricular signal resulting from a most recent pacing pulse.

9. (Previously presented) The method of claim 6, wherein comparing a past ventricular signal resulting from a past pacing pulse with the ventricular signal resulting from the delivered pacing pulse comprises comparing at least one morphological characteristic of the past ventricular signal to a same morphological characteristic of the ventricular signal resulting from the delivered pacing pulse.

10. (Original) The method of claim 9, wherein the morphological characteristic includes at least one of a minimum amplitude of a signal, a maximum amplitude of a signal, a width of a signal, a slope of a signal, T-wave timing and T-wave amplitude.

11. (Previously presented) A device comprising:

at least one electrode to deliver a pacing pulse to a heart and sense a ventricular signal resulting from the delivered pacing pulse; and
a processor that detects intrinsic ventricular activity within the sensed ventricular signal within the heart after delivering the pacing pulse and extends a pacing interval between the delivered pacing pulse and a subsequently delivered pacing pulse based on the detection of intrinsic ventricular activity.

12. (Original) The device of claim 11, wherein the processor modifies the pacing interval to aid in detecting intrinsic ventricular activity within the heart.

13. (Original) The device of claim 12, wherein the processor modifies the pacing interval modifies the pacing interval by modulation of atrial to ventricular delay.

14. (Original) The device of claim 11, wherein the electrode comprises an electrode to deliver a pacing pulse to a ventricle of the heart.

15. (Original) The device of claim 11, wherein a subsequently delivered pacing pulse comprises a pacing pulse delivered to a ventricle of the heart after the delivered pacing pulse.

16. (Previously presented) The device of claim 11, wherein the processor detects intrinsic ventricular activity by comparing a past ventricular signal resulting from a past pacing pulse with the ventricular signal resulting from the delivered pacing pulse.

17. (Original) The device of claim 16, wherein the processor that compares a past ventricular signal that is representative of a ventricular signal where the heart is fully captured by the past pacing pulse.

18. (Original) The device of claim 16, wherein the processor compares a most recent ventricular signal resulting from a most recent pacing pulse.

19. (Previously presented) The device of claim 16, wherein the processor compares at least one morphological characteristic of the past ventricular signal to a same morphological characteristic of the ventricular signal resulting from the delivered pacing pulse.

20. (Original) The device of claim 19, wherein the processor compares at least one of a minimum amplitude of a signal, a maximum amplitude of a signal, a width of a signal, a slope of a signal, T-wave timing and T-wave amplitude.

21. (Original) The device of claim 16, further comprising a memory to store the past ventricular signal.
22. (Previously presented) A computer-readable medium comprising instructions to cause a processor to:
 - control a pulse generator to deliver a pacing pulse to a heart;
 - sense a ventricular signal resulting from the delivered pacing pulse;
 - detect intrinsic ventricular activity within the sensed ventricular signal within the heart after delivering the pacing pulse; and
 - extend a pacing interval between the delivered pacing pulse and a subsequently delivered pacing pulse based on the detection of intrinsic ventricular activity.
23. (Original) The computer-readable medium of claim 22, further comprising instructions to cause the processor to modify the pacing interval to aid in detecting intrinsic ventricular activity within the heart.
24. (Original) The computer-readable medium of claim 23, wherein the instructions cause the processor to modify the pacing interval by modulation of atrial to ventricular delay.
25. (Original) The computer-readable medium of claim 22, wherein the pacing pulse delivered to the heart comprises a pacing pulse delivered to a ventricle of the heart.
26. (Original) The computer-readable medium of claim 22, wherein the subsequently delivered pacing pulse comprises a pacing pulse delivered to a ventricle of the heart after the delivered pacing pulse.

27. (Previously presented) The computer-readable medium of claim 22, wherein the instructions cause the processor to detect intrinsic ventricular activity within the heart by comparing a past ventricular signal resulting from a past pacing pulse with the ventricular signal resulting from the delivered pacing pulse.
28. (Original) The computer-readable medium of claim 27, wherein a past ventricular signal comprises a past ventricular signal that is representative of a ventricular signal where the heart is fully captured by the past pacing pulse.
29. (Original) The computer-readable medium of claim 27, wherein the past ventricular signal further comprises a most recent ventricular signal resulting from a most recent pacing pulse.
30. (Previously presented) The computer-readable medium of claim 27, wherein the instructions cause the processor to compare the past ventricular signal resulting from the past pacing pulse with the ventricular signal resulting from the delivered pacing pulse by comparing at least one morphological characteristic of the past ventricular signal to a same morphological characteristic of the ventricular signal resulting from the delivered pacing pulse.
31. (Original) The computer-readable medium of claim 30, wherein a morphological characteristic includes a minimum amplitude of a signal, a maximum amplitude of a signal, a width of a signal, a slope of a signal, T-wave timing and T-wave amplitude.